COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

| [X] | original |
|-----|----------------------|
| [] | divisional |
| [] | continuation |
| [] | continuation-in-part |

This declaration is of the following type:

INVENTORSHIP IDENTIFICATION

My residence, post office address and citizenship are as stated below next to my name. I believe I am an original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled:

TITLE OF INVENTION

CVD BST FILM COMPOSITION AND PROPERTY CONTROL WITH THICKNESS BELOW 200 Å FOR DRAM CAPACITOR APPLICATION WITH SIZE AT 0.1 μm OR BELOW

SPECIFICATION IDENTIFICATION

The specification of which:

| [X] | is attached here | to | | | | | | |
|-----|------------------|---------|--------------|-------|----------|------------------|----------------|--------|
| ĺĺ | was filed on _ | | , under | Seria | ıl No | , exc | ecuted on ever | 1 date |
| | herewith; or [|] Expre | ss Mail No. | (as S | erial No | o. not yet knowr | n) and was amo | ended |
| | on | | (if applical | ole) | | | | |
| [] | was describe | d and | claimed | in | PCT | International | Application | No. |
| | | | filed on _ | | | and as ar | nended under | PCT |
| | Article 19 on | | | | | · | | |

ACKNOWLEDGMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose all information I know to be material to patentability in accordance with Title 37, Code of Federal Regulations, 1.56,

and which is material to the examination of this application; namely, information where there is a substantial likelihood that a reasonable Examiner would consider it important in deciding whether to allow the application to issue as a patent, and

In compliance with this duty there is attached an Information Disclosure [X]Statement in accordance with 37 CFR 1.98.

PRIORITY CLAIM (35 U.S.C. §119)

I hereby claim foreign priority benefits under Title 35, United States Code, §119, of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America or of any United States Provisional Application(s) listed below, and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed.

| [X] | No such applications have been filed. |
|-----|-----------------------------------------------|
| [] | Such applications have been filed as follows: |

Prior foreign/PCT/provisional application(s) filed within 12 mos. (6 mos. for design) A. prior to this application, and any priority claims under 35 U.S.C. § 119

| Country/PCT | Application No | Date Filed | Priority Claimed |
|-------------|----------------|------------|------------------|
| | | | [] Yes [] No |
| | | | [] Yes [] No |

В. All foreign application(s), if any, filed more than 12 mos. (6 months for design) prior to this U.S. application

Country: Application No: Filing date:

PRIORITY CLAIM (35 U.S.C. §120)

5

I hereby claim the benefit under Title 35, United States Code, § 120, of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information that is material to the examination of this application (namely, information where there is substantial likelihood that a reasonable Examiner would consider it important in deciding whether to allow the application to issue as a patent) which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application.

| [X] No s | No such applications have been filed | | | | | |
|------------|--------------------------------------|-------------------------|-----------|--|--|--|
| [] Such | n applications have l | been filed, as follows: | | | | |
| | | Status | | | | |
| Serial No. | Filing Date | Patented Pending | Abandoned | | | |

POWER OF ATTORNEY

I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith:

Peter J. Sgarbossa, Reg. No. 25,610; Donald Verplancken, Reg. No. 33,217; Lawrence Edelman, Reg. No. 25,226; Michael B. Einschlag, Reg. No. 29,301; Joseph Bach, Reg. No. 37,771; Raymond Kam-On Kwong, Reg. No. 37,165; James C. Wilson, Reg. No. 35,412; Robert W. Mulcahy, Reg. No. 25,436; Walter Benjamin Glenn, Reg. No. 44,713; Steven B. Kelber, Reg. No. 30,073; Marc R. Labgold, Ph.D., Reg. No. 34,651; Paul C. Kimball, Reg. No. 34,641; Laura A. Donnelly, Reg. No. 38,435; Wilburn L. Chesser, Reg. No. 41,668; Scott D. Eads, Reg. No. 41,726; James M. Heintz, Reg. No. 41,828; Laura D. Nammo, Reg. No. 42,024; Amy L. Miller, Reg. No. 43,804; and Christopher W. Raimund, Reg. No. 47,258

Send correspondence to:

Direct telephone calls to:

Patent Counsel, MS/2061 Legal Affairs Dept. Applied Materials, Inc. POBox 450A Santa Clara, CA 95052 Steven B. Kelber (30,073) Piper Marbury Rudnick and Wolfe, LLP (202) 861-3900

DECLARATION

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and, further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Sec. 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Full name of first inventor: Shreyas KHER

Inventor's signature:
Date: 6/21/0/

Residence:

Campbell, California 95008

Post Office Address: 1656 Adrien Drive

Campbell, California 95008

U.S.A.

Country of Citizenship: India

| Full name of second | inventor: Yaxin WANG | | | | |
|---------------------------------------------------------------------|-------------------------------------------|--|--|--|--|
| Inventor's signature:_ | | | | | |
| Date: | | | | | |
| Residence: | Fremont, California 94539 | | | | |
| Post Office Address: | 41569 Joyce Avenue | | | | |
| | Fremont, California 94539 | | | | |
| | U.S.A. Country of Citizenship: P.R. China | | | | |
| Full name of third inventor: Jun ZHAO Inventor's signature: | | | | | |
| Date: | | | | | |
| Residence: | Cupertino, California 95014 | | | | |
| Post Office Address: | 11764 Ridge Creek Court | | | | |
| | Cupertino, California 95014 | | | | |
| | U.S.A. Country of Citizenship: P.R. China | | | | |

(Declaration ends with this page)

COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

| This declaration i | S | of th | e foll | owing | ; ty | pe: |
|--------------------|---|-------|--------|-------|------|-----|
|--------------------|---|-------|--------|-------|------|-----|

| [X] | original |
|-----|----------------------|
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SPECIFICATION IDENTIFICATION

The specification of which:

| [X] [] | is attached hereto was filed onherewith; or [] F | , under Express Mail No. | Seria (as Se | l No erial No | | ecuted on even and was ame | |
|------------|---------------------------------------------------|------------------------------------|-----------------|------------------|---------------|-----------------------------|-----|
| [] | on was described | (if applicate and claimed filed on | ole) | | International | | No. |
| | Article 19 on | • | | | | | |

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A.

В.

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PRIORITY CLAIM (35 U.S.C. §119)

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| [X] No such applications have been filed.[] Such applications have been filed as follows: | | | | | |
|-----------------------------------------------------------------------------------------------------------------------|---------------------------|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|--|
| Prior prior | foreign/Po to this app | CT/provisional appli plication, and any pr | cation(s) filed wire in the control of the control | thin 12 mos. (6 mos. for design) er 35 U.S.C. § 119 | |
| <u>Count</u> | ry/PCT | Application No | <u>Date Filed</u> | Priority Claimed [] Yes [] No [] Yes [] No | |
| | reign appl s U.S. app | | ed more than 12 n | nos. (6 months for design) prior | |
| Count Applie Filing | cation No: | | | | |

PRIORITY CLAIM (35 U.S.C. §120)

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| LJ | ch applications have b | peen filed, as follows: | |
|------------|------------------------|-------------------------|-----------|
| | | Status | |
| Serial No. | Filing Date | Patented Pending | Abandoned |

No grade applications have been filed

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Endl manne of Court inventors Charges VIIED

Steven B. Kelber (30,073) Piper Marbury Rudnick and Wolfe, LLP (202) 861-3900

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| run name of first my | entor: Si | illeyas KHEK | | |
|-----------------------------|-----------------------|-------------------------------|--|--|
| Inventor's signature:_ | | | | |
| Date: | | | | |
| Residence: | Campbe | ll, California 95008 | | |
| Post Office Address: | ss: 1656 Adrien Drive | | | |
| | Campbel | l, California 95008 | | |
| | USA | Country of Citizenship: India | | |

| Full name of second | inventor: Yaxin WANG | | | | |
|------------------------------|-------------------------------------------|--|--|--|--|
| Inventor's signature: | grin De | | | | |
| Date: 7-10-20 | ol | | | | |
| Residence: | Fremont, California 94539 | | | | |
| Post Office Address: | 41569 Joyce Avenue | | | | |
| | Fremont, California 94539 | | | | |
| | U.S.A. Country of Citizenship: P.R. China | | | | |
| | | | | | |
| Full name of third in | aventer: Jun 7UAO | | | | |
| ruii name of third in | ivenior. Jun Zhao | | | | |
| Inventor's signature: | | | | | |
| Date: | | | | | |
| Residence: | Cupertino, California 95014 | | | | |
| Post Office Address: | 11764 Ridge Creek Court | | | | |
| | Cupertino, California 95014 | | | | |
| | U.S.A. Country of Citizenship: P.R. China | | | | |
| | | | | | |

(Declaration ends with this page)

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| This | decla | aration | is | of the | f | ollov | ving | type: |
|------|-------|---------|----|--------|---|-------|------|-------|
| | | | | | | | | |

| [X] | original |
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| [] | divisional |
| [] | continuation |
| | continuation-in-part |

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The specification of which:

| [X] | is attached hereto |) | | | | |
|-----|--------------------|------------------|---------------|------------------|----------------|------------|
| | was filed on | , under | Serial No | , exc | ecuted on even | date |
| | herewith; or [] | Express Mail No. | (as Serial No | o. not yet knowr | and was ame | nded |
| | on | (if applicat | ole) | | | |
| [] | was described | and claimed | in PCT | International | Application | No. |
| | | filed on _ | | and as ar | nended under | PCT |
| | Article 19 on | | | | | |

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A. Prior foreign/PCT/provisional application(s) filed within 12 mos. (6 mos. for design) prior to this application, and any priority claims under 35 U.S.C. § 119

| Country/PCT | Application No | Date Filed | | ļ | Priori | <u>ty</u> | <u>C</u> | laimed | l |
|-------------|----------------|------------|---|---|--------|-----------|----------|--------|---|
| | | | [| 1 | Yes | [|] | No | |
| | | | ſ | 1 | Yes | ſ | 1 | No | |

B. All foreign application(s), if any, filed more than 12 mos. (6 months for design) prior to this U.S. application

Country:
Application No:
Filing date:

PRIORITY CLAIM (35 U.S.C. §120)

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| [X] No s | uch applications ha | ve been filed | |
|------------|---------------------|-------------------------|-----------|
| [] Such | applications have l | peen filed, as follows: | |
| | | Status | |
| Serial No. | Filing Date | Patented Pending | Abandoned |

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U.S.Ā.

Steven B. Kelber (30,073) Piper Marbury Rudnick and Wolfe, LLP (202) 861-3900

1

DECLARATION

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| Full name of first inv | ventor: Shreyas KHER | |
|------------------------|----------------------------|--|
| Inventor's signature: | | |
| Date: | | |
| Residence: | Campbell, California 95008 | |
| Post Office Address: | 1656 Adrien Drive | |
| | Campbell, California 95008 | |

Country of Citizenship: India

| Inventor's signature:_ | | | |
|------------------------|----------------------|------------------------------------|--|
| Date: | | | |
| Residence: | Fremont, Ca | alifornia 94539 | |
| Post Office Address: | : 41569 Joyce Avenue | | |
| | | alifornia 94539 | |
| | U.S.A. | Country of Citizenship: P.R. China | |
| | | | |
| | | | |

Full name of third inventor: Jun ZHAO

Full name of second inventor: Yaxin WANG

Inventor's signature: Date:_

Residence:

Cupertino, California 95014 Post Office Address: 11764 Ridge Creek Court Cupertino, California 95014

U.S.A.

Country of Citizenship: P.R. China

(Declaration ends with this page)